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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/08171

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : E21B 23/00, 43/10

US CL : 166/380, 382, 207

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 166/380, 382, 207, 206

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,785,193 A (KINLEY et al) 15 January 1974 (15/01/1974), Figures 1-3.	2, 4-6 and 8-15
X	US 2,627,891 A (CLARK) 10 February 1953 (10/02/1953), Figures 1 and 4.	2, 4-6 and 8-15
A, P	US 6,543,552 A (METCALFE et al) 08 April 2003 (08/04/2003), Figures 1-7.	1-15
A	US 3,818,734 A (BATEMAN) 25 June 1974 (25/06/1974), see Figure 1.	1-15
A	US 2003/0024711 A1 (SIMPSON et al) 06 February 2003 (06/02/2003), Figure 2	1-15



Further documents are listed in the continuation of Box C.



See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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